XVIII. Descriptions of some new Hesperiidæ from Central and South America. By Hamilton H. Druce, F.L.S., etc.

[Read June 3rd, 1908.]

### PLATE XXI.

THE present paper contains descriptions of some new forms of conspicuous genera and the types are contained in our own collection. Through the kindness of Colonel C. Swinhoe I have been able to carefully examine Plötz's volumes of MS. drawings and thereby identify many of his species described in the volumes of the Stettin Ent. Zeit. Dr. Godman's paper on the American species described by this author (Anns. Mag. Nat. Hist., ser. 7, v. xx, 1907) has practically cleared up all difficulties in connection with those on which his paper treats.

On a recent visit to Paris I have shown all the species described herein to M. Mabille, who agrees that they are new, excepting the form I propose to call *Croniades auraria*. And my best thanks are due to him for his kindness in showing me his collection and many of his types.

M. Mabille is responsible for Fasc. XVII, Fam. HES-PERIDÆ of Genera Insectorum published by M. P. Wytsman in Brussels in 1904, which, although useful to students of this family, is unfortunately very incomplete. I propose now to deal only with the sub-family Pyrrhopy-ginæ and the first few genera of Hesperiinæ as arranged by him, and give here a list of species which he has entirely omitted, but at the same time I am not prepared to say these are all.

In the genus Pyrrhopyge he does not mention—

P. anina, Plötz, Stett. Ent. Zeit. p. 533 (1879). MS. drawings, pl. 1274 = C. styx, Mosch. fide Plötz.

P. rufinucha, G. & S., P.Z.S. 1879, p. 151. A distinct

species with a red collar.

P. bogotana, Rkt. Acad. Nat. Sci. Philad. 1868, p. 89. A synonym of P. hygicia, Feld. (misspelt hygiæa, p. 3, No. 33).

P. creona, Druce, Cist. Ent., p. 290 (1874), of which M. Mabille's P. aurora (Bull. Soc. Ent. Belg. 1891, Nov. Lep., pl. xiv, f. 3) is a synonym also omitted.
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P. phwax, Hopff. Stett. Ent. Zeit. 1874, p. 368. Plötz, MS. drawings, pl. 1300.

P. josepha, Plötz, Stett. Ent. Zeit. xl, p. 534 (1879), MS.

drawings, pl. 1287.

Dr. Godman's drawing of the type in the Berlin Museum shows a red head, but Plötz's drawing has red palpi only.

## Genus Yanguna.

Omitted.

Y. (Pyr.) cosyra, Druce, Cist. Ent. 1875, p. 363. Godman and Salvin, B.C.A. Lep. Rhop. ii, p. 258, pl. lxxiv, ff. 1, 2.

Y. (Pyr.) parima, Plötz, Stett. Ent. Zeit. xlvii, p. 116 (1886).

MS. drawings, pl. 1597.

### Genus Metardaris.

M. cosinga, Hew., incorrectly spelt consinga.

### Genus Jemadia.

Omitted.

J. imitator, Mabille, Bull. Soc. Ent. de Belg. 1891. Nov. Lep. p. 102, pl. xiv, f. 2, probably = J. hospita, Butler.

J. (Pyr.) hephæstos (Mosch. in litt.), Plötz, Stett. Ent. Zeit.
xl, p. 521 (1879). Plötz, MS. drawings, pl. 1594.
J. (Pyr.) ulixes, Plötz, Stett. Ent. Zeit. xl, p. 521 (1879).

J. (Pyr.) ulives, Plötz, Stett. Ent. Zeit. xl, p. 521 (1879).
MS. drawings, pl. 1217.

## Genus Myscelus.

M. wthras, Hew. (?) No. 5, appears to be a MS. name.

M. orbius, Mabille, No. 11, is a synonym of M. amystis, Hew., No. 4.

M. epimachia, H.S., misspelt epinæchia.

## Genus Pyrrhopygopsis.

Omitted.

P. (Hesp.) camposa, Plötz, Stett. Ent. Zeit. xlvii, p. 90 (1886), MS. drawings, pl. 1360.

P. (Hesp.) quispica, Plötz, idem, MS. drawings, pl. 1361.

P. (Pyrrhopyge) maravilha, Foetterle, Revista Paulista,
 p. 637, pl. xviii, f. 1 (1902).
 P. (Thymele) subvirescens, Schaus., Pr. U.S. Nat. Mus. vol.

xxiv (1902), p. 426.

Omitted.

Genus *Pseudosarbia*, Berg. An. Mus., Nac. Buenos Aires, p. 256 (1897), of which the type is *P. phænicola*, Berg., which is like *Sarbia pertyi*, Plötz, and is probably allied to the genus *Pyrrhopygopsis*.

### Genus Phocides.

Omitted.

P. phanias, Burm. Descrip. Rep. Arg. p. 56 (1880), stated by Berg. to = P. palemon, Cr.

P. charon, Feld. Wien. Ent. Mon. iii, p. 405 (1859).

P. imbreus, Plötz, Stett. Ent. Zeit. xl, p. 406 (1879), MS. drawings, pl. 1198. [Type Mus. Berol.]

### Genus Tarsoctenus.

Omitted.

T. (Eryeides) herrichii, Herr. Schff, Prods. 1869, p. 60, no. 10. Plötz, MS. drawings, pl. 1204.

T. (Eryeides) erebus, Plötz, Stett. Ent. Zeit. xl. (1879), p. 407, MS. drawings, pl. 1201.

I suppose it would be possible to go through the whole work and find omissions and mistakes on almost every page, and I have noticed that many African species described by Dr. Butler in the P.Z.S. and also by Mr. Lathy and others are not included, but I have said enough to warn students of this difficult group not to describe as new, without further research, species that they do not find in this work, and it is to be hoped that M. Mabille will be able to revise and republish his lists. As for the indices, the less said the better. They are very inaccurate, and in more than one case names are referred to as being on pages which do not exist.

## Sub-family, PYRRHOPYGINÆ.

### Pyrrhopyge, Hübn.

Pyrrhopyge infantilis, sp. nov. (Plate XXI, fig. 1.)

3. Upper-side. Uniform dark indigo-blue; cilia of both wings pure white except apical third of fore-wing which is black. Underside, fore-wing dark indigo-blue with inner margin towards base brownish-black; hind-wing indigo-blue with basal half pale

bluish-white crossed by narrowly black veins. Cilia of both wings white except apical third of fore-wing, which is black as above. Anal segment and tuft, palpi and front of head, bright red; terminal joint of palpi minutely deep black. Antennæ, space between eyes, thorax, collar, and abdomen, concolorus with wings. Legs wholly black.

Expanse 1 9 inch.

Hab. Peru.

This is a curious insect much like *P. phidias*, Linn., but is smaller and has a shorter and less pointed fore-wing, and the anal angle of the hind-wing is less produced, and more rounded. The front of the head only, is red.

# Pyrrhopyge cruor, sp. nov. (Plate XXI, fig. 2.)

3. Upper-side dark indigo-blue shading to green; anal angle of hind-wing rich red. Cilia of both wings, except towards apex of fore-wing which is black and of anal angle which is red, pure white. The fore-wing is crossed just before the middle by a broad band of differently placed scales—darker than the ground colour of the wing—commencing on the subcostal nervure, where it is broadest and reaching almost to a point, to the submedian nervure. Palpi glossy black; antennæ black; head black with a long white frontal spot and white spots at the base of the antennæ and between the eyes. Collar broadly dark red. Under-side as above with the transverse fascia on the fore-wing widening out beyond the end of the cell. Legs wholly black.

Expanse 21 inch.

Hab. Pozuzo, Peru (800 m. I. Egg).

Perhaps nearest to *P. agenoria*, Hew., which we have also from Peru (La Merced), and which it resembles in all respects, excepting the broad dark fascia described above. *P. agenoria* has never been figured, and I have identified it from M. Mabille's collection, he having seen the type in the Staudinger cabinet.

# Pyrrhopyge sanies, sp. nov. (Plate XXI, fig. 3.)

3. Upper-side rich dark brown with bluish reflections. Forewing crossed rather before the middle by a semihyaline opalescent white fascia commencing broadly on the subcostal nervure and ending in a point on the submedian nervure and divided into three

by the black median nervules. Cilia pure white; black towards the apex. Hind-wing concolorus with the fore-wing and with the anal angle rich red, and the cilia pure white from apex to the red area. Palpi, legs, and antennæ deep black; head black with a white frontal spot and white spots between and at the base of the antennæ. Collar broadly rich red. Abdomen concolorus with wings above and below and with two minute white spots below at the base of the anal segment.

Expanse  $2\frac{1}{10}$  inch.

Hab. FARINAS, LA PAZ, Bolivia (1,500 m.).

This insect has a transverse fascia as in the preceding *P. cruor*, but it crosses the wing more obliquely. They are both perhaps allied to *P. styx*, Moschs., which has red palpi and a red anal tuft and is well figured by Plötz in his MS. drawings (Pl. 1274) as *P. anina*, Plötz.

### JEMADIA, Watson.

Jemadia scomber, sp. nov. (Plate XXI, fig. 4.)

Q. Both surfaces black with subhyaline spots and pale bluish bands as is usual in the genus but distinguished from all others by the broad ultra basal whitish-blue band on the fore-wing above and by the large whitish undivided basal area of the hind-wing on the same surface. On the under-side the blue bands are arranged much as in J. hospita, Butler, but the extreme abdominal margin appears to be black, not blue as in that species.

Expanse 31 inch.

Hab. Pozuzo, Peru, 5,000-6,000 ft. (Native collectors).

Although of the well-known Jemadia type, this form differs more from any described than any of the others differ inter se so far as the colour and pattern of the wings are concerned. Messrs Godman and Salvin have shown in the "Biologia Centrali Americana" the great difference which exists in the male genitalia of the various species. J. scomber is the giant of the genus, being much larger than any other known. Mr. H. J. Adams has a specimen also from Peru.

## CRONIADES, Mabille.

Croniades auraria, sp. nov.

3. Allied to C. pieria, Hew., from which it differs by the position

of the central transverse subhyaline band and the more conspicuous outer marginal yellow band of the fore-wing, and by the black ultramedian band on the hind-wing being much reduced and nearly obsolete at its junction with the subcostal nervure. Under-side as above, the outer-marginal yellow band of the fore-wing even wider; anal half of the hind-wing richer orange than the costal area. Palpi pure white; tips black.

Expanse  $2\frac{3}{10}$  inch.

Hab. Farinas, La Paz, Bolivia (1,500 m.).

Mons. Mabille, to whom I showed this insect, considered it to be *P. pieria*, Hew., but I do not hold the same opinion.

Mr. H. J. Adams has a specimen, identical, from the

same locality.

Watson, P.Z.S., 1893, p. 14, states that pieria, Hew., and machaon, Hew., are probably not congeneric with iphinous, Latr. (the type of Mimoniades) nor even with each other. Mons. Mabille has recently erected a new genius for pieria, i. e. Croniades "Gen. Insect." Fasc. xvii, p. 13), which he has placed first in the list and included machaon with it.

# Sub-family, *HESPERIINÆ*. THYMELE, Fab.

# Thymele palliolum, sp. nov. (Plate XXI, fig. 5.)

Q. Upper-side; both wings blackish-brown with the basal thirds suffused with pale shining blue. Fore-wing with a subapical row of small white dots placed near the costal margin, the middle dot being slightly nearer to the base. A median white transverse band composed of 3 quadrate spots and two small costal dots divided by the brown nervules. Under-side paler than above with dots and transverse band as above; sprinkled with yellow scales along the costal margin from the base to the white band and opalescent-blue at the extreme base. Hind-wing dark brown with short darker central bands and sprinkled with yellow scales from base, where they are thickest, to beyond middle. Head and thorax above opalescent-blue; abdomen brown above with blue scales. Palpi pale buff. Legs yellowish. Antennæ black, with a yellowish ring at base of club. Cilia of both surfaces slightly paler than wings.

Expanse  $2\frac{1}{5}$  inch.

Hab. Carrillo, Costa Rica (Underwood).

At first sight like *T. brevicauda*, Plötz\* (*T. eniopeus* of the B.C.A.), but on closer examination quite different.

### Sub-family, PAMPHILINÆ.

### PRENES, Scudder.

Prenes grapte, sp. nov. (Plate XXI, fig. 6.)

3. Upper-side dark brown with the basal half dark yellowish-buff. Fore-wing with a small, oblong, subhyaline spot within and at the end of, the cell. Two minute subapical dots, a small spot above the second median nervule, a larger sagittate spot at the base of the lower median nervules and a small spot resting above the centre of the submedian nervure. Cilia of both wings pale brownish-white. Underside; ground colour paler; spots on fore-wing as above but spot on submedian nervure larger and less distinctly defined. Hind-wing; a small, circular, clearly defined, white spot in the cell, an ultramedian white band commencing in a point on the costal nervure and broadening greatly to the submedian nervure. Outer margin broadly brownish-grey, crossed by the brown nervules. Anal fold broadly brown, except anal margin, which is narrowly brownish-grey.

Head, thorax and abdomen above concolorus with base of wings. Palpi yellowish-buff, sprinkled with yellowish hairs; terminal joint black. Thorax and legs dark brown; abdomen below, with yellow spots. Antennæ black above; yellowish below.

Expanse  $2\frac{1}{10}$  inch.

Hab. PERU.

Allied to *P. luctuosa*, Herr. Schäff.† (Plötz MS. drawings, pl. 426) and to *P. pauper*, Mabille, Pet. Nouv. Ent. p. 201 (1878), but differs on the hind-wing below and has the additional spot in the cell of that wing.

### AIDES, Billberg.

Aides ineantator, sp. nov. (Plate XXI, fig. 7.)

Q. Upper-side. Both wings dark brown with the basal areas thickly clothed with yellowish-buff hairs. Fore-wing with the

<sup>\*</sup> Goniurus brevicauda, Plötz, Stett. Ent. Zeit. xlvii, p. 83 (1886), MS. drawings, pl. 1319.

<sup>†</sup> Goniurus luctuosa, Herr. Schäff., Prodn. Syst. Lep. iii, p. 73 (1869).

costal margin—except the extreme base which is yellowish—cupreous, extending well beyond the middle of the cell. Four irregular, subhyaline, whitish spots, one in the middle of the cell, one each between the median nervules and one just above the submedian nervure. The three forming a row of which the centre is the largest. Cilia of both wings whitish, except at apices where they are brown. Under-side. Fore-wing cupreus; discal and basal areas blackish-brown, inner margin pale brown. Spots as on upperside, with the addition of a small yellow streak within the costal nervure adjoining the cell spot. Hind-wing dark cupreus; brownish towards the abdominal margin. A central, irregular, silverywhite patch composed of confluent quadrate patches and two separate spots, the smaller placed near the end of the cell, the larger beyond it, above the median nervure. Cilia as on upper-side. Palpi and front of thorax yellow. Legs brown. Abdomen brown above and below, clothed with buff hairs towards base on upper side.

Expanse 23 inch.

Hab. Carrillo, Costa Rica (Underwood).

Allied to A. wstriu, Hew., and A. dysoni, Godm., but distinguished by the different form of the silver marking on the under-side of the hind-wing.

### DION, Godman.

Dion gemmatus. (Plate XXI, fig. 8.)

Carystus gemmatus, Bull. Cist. Ent. I, p. 86 (1872). Lep. Ex. p. 186, t. 64, f. 2.

Dion gemmatus, Godm. B. C. A., Lep. Rhop. ii, p. 593, pl. cii, ff. 37, 38. 3.

Q. Upper-side rich dark brown; apical half brownish-buff, darker towards apex, with dark brown veins. Under-side; forewing dark brown, apical half pale yellow with the veins dark brown, gradually deepening towards the margins. Apex narrowly dark brown. Cilia dark brown. Hind-wing as in \$\delta\$.

Expanse 21 inch.

Hab. Escazu, Costa Rica (Underwood).

This interesting insect is remarkable for its dissimilarity to the  $\mathcal{Z}$ .

There are 3 33 in Mr. Godman's collection, but no 2.

### Dion rubrinota, sp. nov. (Plate XXI, fig. 9.)

3. Upper-side blackish-brown with the internervular spaces paler. Cilia dark brown; glossy. A large inconspicuous brown brand near the centre of the wing, placed just below the cell and divided unevenly by the lower median nervule; the smaller portion, which is rather less than one-third, being below. Under-side. Fore-wing greyish-brown, with a slightly yellowish radiating fascia beyond the middle, and crossed by black nervules and black internervular radiations originating on the margin. Cilia black. A vellowish spot at the extreme base. Hind-wing grevish-brown. crossed by black nervules and black internervular radiations. excepting the anal fold, which is broadly greyish-brown. Costal margin, above the costal nervure, wholly brick-red. A slight brickred dash at the base of the lower wall of the cell and another red dash just below the cell from the base extending nearly to the middle of the wing. The extreme anal margin is brick-red from the base to the anal angle. Head, palpi, legs and abdomen black. Antennæ black. Eves reddish.

Expanse 21 inch.

Hab. Huancabamba, E. Peru, 6,000-7,000 ft. (Boetger).

Quite unlike any other described species and undoubtedly belonging to this genus. I have not seen the  $\mathfrak{P}$ .

## THRACIDES, Hübner.

Thracides panimeron, sp. nov. (Plate XXI, fig. 10.)

J. Upper-side dark indigo blue without spots or markings, paler towards outer margins. When held at an angle, the inner margin from base to beyond the middle and the median interspace from base to the brand in fore-wing and the basal half of the hind-wing appear to be shining opalescent ultramarine-blue, shading to green; as also are the thorax and base of the abdomen. Cilia pure white; except the extreme apices of both wings which are dark brown. Under-side; both wings dark greenish indigo-blue, with the costal and apical areas of the fore-wing, and the whole of the hind-wing, excepting the abdominal fold, thickly dusted with dark reddish cupreus scales. The inner margin of the fore-wing is shining dark chocolate-brown. The lower portion of the cell of the fore-wing contains a broad streak of opalescent-blue shading to green, but not extending to the extreme base. Below this, at the base of, and lying

on the median nervure, is a pale greyish-brown brand, composed of differently formed scales, and protected by a fringe of short black hairs attached to the margin of the hind-wing. Cilia as on upperside. Palpi reddish-orange, with the terminal tip minutely black, and some blackish hairs near the eyes. Collar reddish-orange. Legs and thorax clothed with opalescent-blue hairs. Abdomen black. Antennæ black. Head metallic greenish-blue. The oblique linear brand on the fore-wing above is composed of three divisions, of which the central is a small round dot.

Expanse 21 inch.

Hab. Farinas, La Paz, Bolivia (1,500 m.).

This beautiful insect is not nearly allied to any described, but may belong to the group which contains the *Thraeides joannisii* recently described, and figured by Mons. Mabille, in Gen. Insect. Fasc. xvii, p. 179, pl. 4, f. 2 (1904), from Chiriqui, but the absence of white spots on the fore-wing and the conspicuous orange collar distinguish it at once.

### Pyrrhopygopsis, Godman.

Mons. Mabille has placed this genus in the sub-family *Hesperiinæ*, although Dr. Godman has clearly shown that by its veination it belongs to the *Pamphilinæ*.

# Pyrrhopygopsis lugubris, sp. nov. (Plate XXI, fig. 11).

J. Upper-side uniform deep black without markings; cilia pure white, greyish towards apices of both wings and at anal angle of hind-wing. Under-side, dark sage-green with all the veins black; inner marginal areas of both wings broadly blackish-brown. A tuft of reddish-brown hairs on the abdomen at the base of the forewing. Head, palpi and legs entirely black excepting the hind tibia which bears a thick reddish-brown mane. The abdomen, which is black above and below, has several reddish-brown lateral stripes on either side and a large reddish-brown anal tuft.

Expanse 23 inch.

Hab. LA PAZ, Bolivia, 1,000 m. (Garlepp).

Allied to *P. romula*, Druce, and *P. tenebricosa*, Hew., but distinguished by the absence of the reddish-brown shoulders on the fore-wing above, which are present in both those insects. It is also allied to *P. reedii*, Weeks, jun., well figured in his Ill. Diurin. Lep. 1905, pl. xvii,

which name, however, falls to *P. quispica*, Plötz,\* as shown by reference to his MS. drawing, pl. 1361. We possess specimens from Rio Colorado, Peru, 2,500 ft., obtained by Watkins and from Charaplaya, Bolivia, 1,350 m., obtained by P. O. Simon.

P. lugubris is a much blacker insect.

Pyrrhopyge maravilha, Foetterle, Revista de Museu Paulista, p. 637, pl. xviii, f. 1 (nec xvi, f. 3), 1902, is another species belonging to this genus and is allied to the beautiful P. camposa, Plötz [Stett. Ent. Zeit. xlvii, p. 90 (1886)], figured in his MS. drawings, pl. 1360, from Minas Geraes, from which it principally differs by possessing red shoulders and by the absence of the bright yellow costal streak on the fore-wing below.

# Pyrrhopygopsis igniculus, sp. nov.

3. Closely allied to *P. orasus*, Druce, from which it differs in the almost complete absence of the conspicuous white basal area on the hind-wing below—it is reduced to a small spot above the costal nervure and some white scaling below the wall of the cell.

Expanse  $2\frac{2}{5}$  inch.

Hab. Pozuzo, Peru, 5,000-6,000 ft. (Native collectors). La Merced, Peru, 2,500 ft., v, vi, 1903 (Watkins and Tomlinson).

Described from two specimens.

## Pyrrhopygopsis caminus, sp. nov.

3. Allied to *P. orasus*, Druce, but paler, and the white of the cilia on the hind-wing extending well into the margin of the wing on the upper-side. On the under-side the costal margin is white from the base to beyond the middle of the cell. The head, palpi and anal segment and tuft are red as in *P. orasus* and there is an additional red tuft on the abdomen at the base of the fore-wing and the fore coxæ are conspicuously red in place of the black of *orasus*.

Expanse 210 inch.

Hab. SAN MARTIN, Llanos of Rio Meta, Colombia (G. D. Child).

The red tuft on the abdomen at the base of the fore-

\* Hesperia quispica, Plötz, Stett. Ent. Zeit. xlvii, p. 90 (1886), MS. drawings, pl. 1361.

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wing below, is also found in P. socrates, Menet., and the red fore coxæ are found in cleanthus, Latr., and telmcla, Hew., which have been placed in this genus recently by Mons. Mabille.

Pyrrhopygopsis agaricon, sp. nov. (Plate XXI, fig. 12.)

3. Upper-side. Dark purple-brown with the basal areas of both wings tawny. Cilia fuscous; whitish towards the anal angle of both wings. Under-side sage-green with the nervules black; inner margin of fore-wing broadly and unevenly black, the black area extending well up to the subcostal nervure. The space between vein 5 and the submedian nervure blackish-brown. Head, palpi, collar and abdomen above and below, tawny. Four posterior segments of abdomen ringed with black. Fore coxe conspicuously tawny, rest of legs black. Antennæ black.

Expanse 210 inch.

Hab. Bogota, Colombia,

There is a specimen in the British Museum from the

Crowley bequest.

I have placed this insect in the genus Pyrrhopygopsis as it has a long pencil of black hairs on the abdominal fold of the hind-wing above and does not show any trace of a costal fold in the fore-wing, but it seems to me to be nearly allied to Phocides xanthothrix, Mabille, the figure of which in Novitates Lepid., pl. v, it closely resembles on the under-side. The large tawny areas and the tawny head and abdomen at once distinguish it. M. Mabille, although he places E. tenebricosa, Hew., in the genus Pyrrhopygopsis still includes P. xanthothrix in Phocides (Genera Insectorum, Fasc. xvii, p. 19, 1904).

EXPLANATION OF PLATE XXI.

[See Explanation facing the Plate.]